

IFW

Practitioner's Docket No. 1962-1

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent application

of \_\_\_\_\_

Inventor(s)

for \_\_\_\_\_

Title of invention

the specification of which is being transmitted herewith

OR

In re application of: McCORVEY, Robert L.

Application No.: 10 / 784,097 Group No.: 3725

Filed: February 23, 2004 Examiner:

For: PROCESS AND APPARATUS FOR FORMING OVERSIZED CIRCULAR  
PIPE

Assistant Commissioner for Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10\*

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is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this  
requirement will **not** be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(Information Disclosure Statement [6-1]—page 1 of \_\_\_\_\_)

**NOTE:** "An information disclosure statement shall be considered by the Office if filed by the applicant:

- (1) Within three months of the filing date of a national application;
- (2) Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application; or
- (3) Before the mailing date of a first Office action on the merits, whichever event occurs last."

37 C.F.R. § 1.97(b).

**NOTE:** "Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section." 37 C.F.R. § 1.56(a).

"Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) each inventor named in the application;
- (2) each attorney or agent who prepares or prosecutes the application; and
- (3) every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application." 37 C.F.R. § 1.56(c).

**NOTE:** The "duty as described in § 1.56 will be met so long as the information in question was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98 before issuance of the patent." Notice of January 9, 1992, 1135 O.G. 13 -25 at 17.

**WARNING:** "No information disclosure statement may be filed in a provisional application." 37 C.F.R. § 1.51(b).

### List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this Information Disclosure Statement:

(check sections forming a part of this statement: discard unused sections  
and number pages consecutively)

1. ☒ Preliminary Statements
2. ☒ FORMS PTO/SB/08A and 08B (formerly FORM PTO-1449)
3. ☐ Statement as to Information Not Found in Patents or Publications
4. ☐ Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted
5. ☐ Cumulative Patents or Publications
6. ☒ Copies of Listed Information Items Accompanying This Statement
7. ☐ Concise Explanation of Non-English Language Listed Information Items
  - 7A. ☐ EPO Search Report
  - 7B. ☐ English Language Version of EPO Search Report
8. ☐ Translation(s) of Non-English Language Documents
9. ☒ Concise Explanation of English Language Listed Information Items (Optional)
10. ☒ Identification of Person(s) Making This Information Disclosure Statement

(complete the following, if appropriate)

Sections \_\_\_\_\_, respectively, have been continued on ADDED PAGE(S).

**NOTE:** "Once the minimum requirements are met, the examiner has an obligation to consider the information." Notice of April 20, 1992 (1138 O.G. 37-41, 37).

## **Section 1. Preliminary statements**

Applicants submit herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

## **Section 9. Concise Explanation of English Language Listed Information Items (OPTIONAL)**

**NOTE:** *"Applicants may, if they wish, provide a concise explanation of why English-language information is being submitted and how it is understood to be relevant. Concise explanations are helpful to the Office, particularly where documents are lengthy and complex and applicant is aware of a section that is highly relevant to patentability or where a large number of documents are submitted and applicant is aware that one or more are highly relevant to patentability." Notice of April 20, 1992 (1138 O.G. 37-41, 38).*

U.S. Patent No. 6,622,680, issued on September 23, 2003 to Kino et al., presents an air intake duct and manufacturing method therefor in which a longitudinal opening in a duct wall is formed. The opening is covered with non-woven fabric, and the lateral width of the opening is set to be not shorter than 1/20 of the circumferential length of the duct wall. Alternatively, a porous member is thermally welded with the head of an opening of a small cylindrical portion projecting from the duct wall of a duct body 1, while the duct body is prevented from deformation. In a method for manufacturing the air take duct, a high-melting molded piece is brought into contact with a hot plate so as to be heated. A low-melting molded piece is disposed at a distance from the hot plate so as to be heated by radiation heat from the hot plate.

U.S. Patent No. 6,110,412, issued on August 29, 2000 to Anderson, discloses a ported tubular air duct and a method for manufacturing a side-port tubular air duct. The mold has two portions which are separated when the mold is opened to permit the positioning of a preheated polypropylene tubular port insert member into an opening in one of the mold portions. A parison of rubber modified polypropylene is injected into the mold. The parison expands into the opening of the tubular port insert member and is burst by the pressure in the parison such that the parison material flows along the interior of the tubular port insert member and merges therewith.

U.S. Patent No. 6,105,227, issued on August 22, 2000 to Bota, presents a machine and methods for automated manufacture of tapered adjustable ducts, and particularly tapered adjustable take offs. A tube of material is cut into gores of predetermined configuration, coupling beads are formed in the gores and the gores are adjustably interconnected to one another to form the finished take off duct in an automated fashion.

U.S. Patent No. 5,636,541, issued June 10, 1997 to W.P.H. Castricum, also teaches an apparatus for forming and cutting spiral pipe having a diameter of less than one inch. The device

## Section 6. Copies of Listed Information Items Accompanying This Statement

*NOTE: 37 C.F.R. 1.98(a)(2) requires that any information disclosure statement filed under § 1.97 shall include: "A legible copy of: (i) Each U.S. and foreign patent; (ii) Each publication or that portion which caused it to be listed; and (iii) All other information or that portion which caused it to be listed, except that no copy of a U.S. patent application need be included . . ."*

*NOTE: The wording in § 1.98(a)(2)(iii) makes it clear that the requirement to submit a copy of each item of information listed in an information disclosure statement does not apply to the citation of a U.S. patent application. Notice of January 9, 1992, 1135 O.G. 13-25, at 14.*

Legible copies of all items listed in Forms PTO/SB/08A and 08B (formerly Form PTO-1449) accompany this information statement.

*(complete the following, if applicable)*

- ☐ Exception(s) to above:
  - ☐ Items in prior application, from which an earlier filing date is claimed for this application, as identified in Section 4.
  - ☐ Cumulative patents or publications identified in Section 5.

for slitting the spiral pipe into sections includes a first knife that is positioned inside the spiral pipe and a second knife that is positioned outside of the pipe. A support sleeve is also positioned outside of the pipe and is in a fixed radial position with respect to the pipe. The inner and outer knives and the support sleeve move axially with the pipe as the pipe is severed.

U.S. Patent No. 5,609,055, issued on March 11, 1997 to W.P.H. Castricum, teaches a method and apparatus for cutting and notching a hollow pipe. This apparatus includes a upper knife assembly having a pipe cutting knife and notch cutting knives with cutting edges adjacent a surface of the pipe and a lower knife assembly having a pipe cutting knife and notch cutting knives with cutting edges adjacent an opposite surface of the pipe. The method of this invention includes stopping the axial and rotational movement of the pipe and moving the lower knife assembly into an overlapping relationship with the upper knife assembly. The notch cutting knives are also moved into cutting position and the axial and rotational pipe movement is resumed.

U.S. Patent No. 5,478,123, issued on December 26, 1995 to Kanao, teaches a pipe joint for connecting a corrugated spiral pipe, which includes an annular projection formed on the axially central portion, a spiral projection bonded on a portion on one side of this projection so as to engage with the spiral pipe, compressible and transformable ring-like sealing bodies bonded on the inner circumferential surfaces on the both sides of the spiral projection, and a small hole for injecting a hardening liquid agent and formed in a portion between the sealing bodies so as to penetrate the portion. A corrugated spiral pipe provided with a joint has the above mentioned joint fitted onto a pipe end of the spiral pipe, and is produced by filling a space portion between the ring-like sealing bodies with a hardened matter of a hardening liquid agent, so that the joint is water-tightly coupled with the pipe end of the spiral pipe.

U.S. Patent No. 5,105,639, issued on April 21, 1992 to Castricum, also discloses an

apparatus for forming spiral pipe. In particular, this device is configured for forming spiral pipe having a diameter of approximately one inch or less. A continuous strip of metal is driven around the mandrel and inside a lateral bore in the forming head in a helical manner. First and second rollers mounted in the forming head partially form a spiral lockseam. A third roller mounted in the upper portion of the forming head closes the spiral lockseam. Various knives are employed so as to sever the pipe as it rotates.

U.S. Patent No. 5,051,081, issued on September 24, 1991 to Kammori, describes a method and apparatus for producing a spiral pipe with a rib that includes continuously extruding a thermoplastic synthetic resin material in a molten state into a tubular form so as to have a diameter and a predetermined wall thickness of a tubular body to be formed, and winding a rib-portion material in a molten state having a hollow shape or a solid shape in section extruded by an extrusion nozzle rotated about the outer periphery of the extruded and molded tubular body relative to the extrusion speed for the extruded and molded tubular body to integrally form a hollow or solid spiral member.

U.S. Patent No. 4,951,493, issued on August 28, 1990 to Fragge et al., teaches a method and apparatus for making a spiral pipe, in which a pipe section is pressed in the direction of the pipe axis over an expansion mandrel in a press. The method provides that the pipe section carries out relative rotation between the expansion mandrel and the pipe section about the pipe axis. An apparatus to implement the method provides that a press ram which is used to move the pipe section forward, and/or the expansion mandrel, are designed to provide relative rotation therebetween.

U.S. Patent No. 4,924,684, issued on May 15, 1990 to Castricum, describes a apparatus and method for forming and cutting spiral pipe. The pipe forming apparatus includes an enclosed forming head and a mandrel. A continuous strip of metal is driven around the mandrel

and inside a lateral bore in the forming head in a helical manner. First and second rollers are mounted in the forming head so as to partially form a spiral lockseam. A third roller is mounted in the upper portion of the forming head so as to close the spiral lockseam. The mandrel is both rotatable and pivotable.

U.S. Patent No. 4,567,742, issued on February 4, 1986 to W.P.H. Castricum, describes a ribbed spiral pipe producing machine. This machine includes conventional elements of a frame, a drive roller for feeding the strip through the frame, a flange roller and folding finger for bending the outer edges of the metal strip, a forming head for forming the strip into a pipe so that the outer edges of the strip mate, and a clenching roller and contra roller for compressing the mated edges to produce a spiral seam. This patented device improves on conventional apparatus by providing only two pairs of edge forming roller assemblies that cooperate to bend the left edge of the strip perpendicular to the strip, and the right edge of the strip into an upward facing, V-shaped channel with its outer edge perpendicular with respect to the strip.

U.S. Patent No. 4,436,239, issued on March 13, 1984 to Tsuyama et al., discloses a method and apparatus for manufacturing a spiral pipe, in which there is first determined a maximum curvature which should be imparted to a strip of pipe forming material in order that a desired residual moment will be imparted to the finished pipe after the strip bent to the maximum curvature is allowed to spring back from the bent condition. By adjusting the position of three rows of forming rolls positioned at the apexes of a triangle, the flat strip is continuously bent into a spiral that has the thus determined maximum curvature. The spirally formed strip is allowed to spring back toward its unbent shape to the diameter of the finished pipe. Finally, the seam of the formed strip is welded when the strip is at the desired diameter of the finished pipe.



**Section 10. Identification of Person(s) Making This Information Disclosure Statement**

The person making this statement is

*(check each applicable item)*

- (a) ☐ the inventor(s) who signs below

\_\_\_\_\_  
SIGNATURE OF INVENTOR

\_\_\_\_\_  
*(type name of inventor who is signing)*

- (b) ☐ an individual associated with the filing and prosecution of this application (37 C.F.R. § 1.56(c))

\_\_\_\_\_  
SIGNATURE OF INVENTOR

\_\_\_\_\_  
*(type name of inventor who is signing)*

- (c) ☒ the practitioner who signs below on the basis of the information:

*(check each applicable item)*

- ☐ supplied by the inventor(s).  
☐ supplied by an individual associated with the filing and prosecution of this application. (37 C.F.R. § 1.56(c))  
☒ in the practitioner's file.

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JUN 03 2004  
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|   |   |    |   |                          |                     |
|---|---|----|---|--------------------------|---------------------|
| Substitute for form 1449A/PTO<br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br><i>(use as many sheets as necessary)</i> |   |    |   | <b>Complete if Known</b> |                     |
|   |   |    |   | Application Number       | 10/784,097          |
|   |   |    |   | Filing Date              | February 23, 2004   |
|   |   |    |   | First Named Inventor     | McCORVEY, Robert L. |
|   |   |    |   | Group Art Unit           | 3725                |
|   |   |    |   | Examiner Name            |                     |
| Sheet   | 1 | of | 1 | Attorney Docket Number   | 1962-1              |

[illegible]

|                       |  |                    |  |
|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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